

Chapter 3

Police Department

Information Systems Technology Enhancement Project

ISTEP

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San Diego Highlights

The San Diego Police Department supports a department wide community policing philosophy and has been a pioneer in problem-solving. In these regards, the department is a model for many police agencies. San Diego defines their policing style as neighborhood policing. The dedication to this philosophy spans the administrations of at least three chiefs and is demonstrated in the department's strong relationship with other governmental agencies and neighborhood organizations. In recognition of their innovation, San Diego hosts the Problem-Oriented Policing Conference each year.

The department has also set a high standard for using technology to support problem solving. The Information Services Unit is housed in the Neighborhood Policing Division. This is an unusual organizational arrangement but it exemplifies San Diego's commitment to use technology to support problem-solving. The most recognizable example of software technology supporting community policing is the use of POP Track, a software program that helps officers solve identified problems using the SARA model. On a larger scale, the recent purchase and ongoing implementation of mobile computer terminals (MCT's) and automated field reporting (AFR) software enables officers to generate reports on their MCT's and send them electronically to supervisors and directly into the records management system. This process allows for quick dissemination of data and subsequent analysis to recognize recent trends or hot spots in the neighborhoods. The training provided for officers on the use of the MCT's and AFR is comprehensive and serves as a model to other cities considering the implementation of similar systems.

Crime analysis is the most recognized technical application in the San Diego Police Department that supports problem-solving for line level officers. Crime analysis staff are nationally recognized and frequently present workshops at conferences on the use of computerized mapping to support problem-solving. They also offer advice on methods of sharing police data with the community.

The San Diego Police Department's web site is among the best in the country, and displays up-to-date crime maps on each city neighborhood. San Diego has also invested significantly in an automated notification system used to send public safety messages to selected residences and businesses in a specific geographic area. The system interfaces with computerized mapping to help in identifying areas in which notifications are to be sent. Finally, SANDGIS (a citywide GIS management group) collects and makes available data from several city agencies for use on inter-organizational projects. The ability of the police department to perform subsequent analysis using several non-police data sets is instrumental in taking problem-solving to a new level in San Diego.



1 Purpose and Scope of Report

This case study is one of several produced for the Information Systems Technology Enhancement Project (ISTEP), a project funded by the Office of Community Oriented Policing Services. The aim of ISTEP is to increase the use of information and information technology in police departments, particularly regarding the implementation of community policing. The case studies document the current state of information technology and the use of information in five police departments: Tempe, Arizona; San Diego, California; Hartford, Connecticut; Reno, Nevada; and Charlotte-Mecklenburg, North Carolina. These case studies are based on a limited review of the status of information technology in the departments. A separate cross-site report synthesizes the findings of the individual case studies. A report on the project's conceptual framework presents the overall ISTEP approach and discusses how community policing demands different types of information systems, analysis methods, and uses of information than those required under the professional-era model of policing.

This report is based on four site visits to the San Diego Police Department. The first visit occurred on November 10, 1997. During this visit the core members of the Abt Associates ISTEP team met with the manager of the Technology Unit and Technology Unit staff members. This visit could be characterized as exploratory in nature, since it consisted of a meeting, a brief tour of the New Technologies Unit, and a demonstration of the terminals in patrol cars. This visit helped to shape both the questionnaire used to guide subsequent visits and this final report.

The second visit occurred February 6-9, 1998. It included interviews, demonstrations, and observations. In addition, a number of primary documents were provided to the Abt team. A key feature of this visit was observation of the bid presentation by the Sierra Group, which was chosen to develop the records management system (RMS).

The third visit took place August 9-11, 1998. The primary purpose of this visit was to conduct interviews with targeted individuals, interview individuals from the Neighborhood Policing Division, and conduct a ride-along. The fourth and final visit occurred October 27-29, 1998. This visit focused on interviews, observations of automated field reporting (AFR) training, and a ride-along. On each visit, an important goal was to obtain documentation. In San Diego this goal was met both with internal documentation provided to the research staff and the ability to download documentation from the San Diego Police Department website.

The organization of this case study document follows the overall conceptual framework for the ISTEP project. Accordingly, after providing background information on the police department in Section 2, particularly with respect to implementation of community policing, the case study describes current and planned information systems (Section 3), analysis methods (Section 4), and uses of information (Section 5). Section 6 summarizes our findings.



2 Police Department Background

2.1 Size, Overall Organization, Crime Levels, and Trends

The San Diego Police Department has a budgeted strength of 2,683 personnel, 2,038 of whom are sworn and 645 of whom are civilians. The total departmental annual budget is \$206,669,345. Personnel expenses total \$186,010,271, of which 77 percent is salaries and wages. The department's nonpersonnel expenses comprise the remainder of the budget, \$20,659,074.

The department is organized into eight divisions: Field Operations, Special Operations, Neighborhood Policing, Training and Development, Office of Administration, Personnel Services, Professional Responsibility, and Support Services. All divisions are commanded by an assistant chief except Personnel Services, which is managed by a civilian personnel director.

Overall, crime in San Diego has been declining. The most recent year for which crime data are available is 1997. Fewer homicides were recorded in 1997 than in any year since 1978. Given the population growth over the last two decades, the homicide rate in 1997 was lower than in 1978; indeed, the murder rate of 6 per 100,000 in 1997 is lower than or equal to any homicide rate since 1972. The violent crime rate in 1997 was 819 per 100,000, lower than at any time since the mid-1980s. Property crime has shown a similar decline. The property crime rate of 4,115 crimes per 100,000 residents in 1997 is the lowest recorded since 1968; and some crimes, such as burglary, have also dropped significantly in the past 20 years.

This picture of substantial declines in crime rates over time does not mean that San Diego is now crime-free. The city still has crime rates equal to or higher than those for the United States as a whole. As in many cities, crime in San Diego has a spatial distribution in specific neighborhoods. That is, while many neighborhoods record little violent crime and low rates of property crime, some neighborhoods continue to be plagued by high rates of both crime types. These neighborhoods have exceptionally high levels of crime, rates that range from four to ten times higher than the citywide average.

2.2 Community-Oriented Policing Background

The San Diego Police Department has a strong commitment to community-oriented policing. In San Diego this commitment is defined as neighborhood policing. The commitment extends beyond the term of any individual police chief. Command rank can identify at least three chiefs who supported and implemented neighborhood policing. The commitment to neighborhood policing can be seen in a number of departmental activities. These include the departmental mission statement, which explicitly recognizes the role of community-oriented policing; the use and presentation of neighborhood-level crime data on the Internet; partnering with other city agencies; citizen police academies; training; implementation and emphasis on the four-step SARA model (scanning, analysis, response, and assessment); use of problem



solving for promotional purposes; and the integration of technology into problem-solving efforts.

San Diego is considered a national leader in problem-oriented policing (POP), and each year the San Diego department co-hosts the Problem Oriented Policing Conference with the Police Executive Research Forum (PERF). The conference is attended by law enforcement representatives from across the nation. Plenary and small-group sessions allow for the identification and discussion of problem-solving techniques, skills, and strategies. This conference has become one of the nation's largest conferences for line-level police officers.

Solicitation of Citizen Input

The San Diego Police Department engages in a variety of efforts to solicit citizen input, including the use of surveys, neighborhood meetings, and citizen police academies. A variety of other means of citizen input are supported through technology, such as the Communicator notification system, e-mail, and the departmental Web page. The police department also places a strong emphasis on partnerships. To this end, the department promotes problem solving that includes multiple agencies and commits the resources of non-law-enforcement groups.

Geographic Focus

The patrol methods used by the San Diego Police Department reflect a strong geographic focus. Policing occurs within neighborhoods, and officers understand and know the geographic boundaries of the neighborhoods. They also understand that individual neighborhoods have identifiable problems that do not necessarily exist in other areas. Geographically based policing in San Diego is supported by the use of geo-mapping by the Crime Analysis Unit. In addition, the Neighborhood Policing Unit helps to train and direct officers to maintain a strong neighborhood focus. This group serves as mentors to patrol officers and is available citywide to help officers develop POP projects and be more effective in neighborhood policing.

Adoption of Community-Oriented Policing Management Styles

Management styles encourage citizen participation, officer problem solving, and the use of data to assess problems. The involvement of command staff in beat meetings, up to and including the chief in some instances, is further evidence of the adaptation of management styles to support community policing. The regular meetings of the chief and assistant chiefs include a focus on community policing and problem solving. These meetings are often driven by data generated by the Crime Analysis Unit.

2.3 Community-Oriented Policing Training and Assessment

Recruits receive mandatory academy training in community-oriented policing, and beat officers are provided with in-service training in the philosophy. In addition, the department supports officers in seeking out additional training. There are numerous



in-service training opportunities, and officers with whom we spoke could identify specific training sessions of interest to them and spoke of general departmental support for engaging in such efforts. There are also a number of national opportunities, and the department is actively involved in PERF-sponsored activities as well as the U.S. Department of Justice, Office of Justice Programs Evaluation Conference.

Promotion practices reflect the departmental commitment to community-oriented policing. Promotions into supervisory positions are gained through a thorough understanding of neighborhood policing and the necessity to relay that understanding to subordinates. In addition, each officer who wishes to be promoted to sergeant is expected to take part in or complete a POP project or understand and support the problem-solving process.

3 Information Systems

3.1 Information Technology Staffing and Responsibility

Information Services is housed in the Neighborhood Policing Division, commanded by an assistant chief. This division consists of the Neighborhood Policing Unit; Sports, Training, Academics, and Recreation (STAR); the Police Institute; and Information Services. This is an unusual arrangement, since information services, technology, and data systems are typically located in a support division. The Area-wide Regional Justice Information System (ARJIS) and Records divisions are located under another assistant chief, who is in charge of Support Services in the department. However, the decision to co-locate Information Services and Neighborhood Policing reinforces the importance of problem solving and the corresponding need for information. The structure of the Neighborhood Policing Division is a direct result of the chief's commitment to community policing.

The Crime Analysis Unit, Data Systems, and New Technology are subdivisions of the Technology unit, each with its own supervisor. Currently Crime Analysis has 12 analysts, 6 funded by the city and 6 funded by grants. This unit is responsible for identifying problems in the city by analyzing data from calls for service, crime reports, and other related data sets. Problem analysis is completed by looking for patterns or trends in events by time of day, day of week, method of operation (MO), and suspect or victim characteristics. To improve the analysis of these data, mapping is used to amplify any spatial patterns in the specific problem being analyzed.

The New Technology Unit (NTU) is staffed by patrol officers who are knowledgeable about and committed to the integration of technology. This unit, headed by a sergeant, is in charge of preparing new laptops for installation by installing software, debugging them, and writing new programs where necessary. In addition, NTU conducts officer laptop and AFR training.

There has been consistent support from at least four chiefs for the development of information systems to support the problem-solving focus of the San Diego Police



Department. This emphasis reflects a long-standing commitment on the part of the department, and there is evidence of organizational change within the department to affirm the significance of information for effective policing.

3.2 Information Systems Related to Professional-Era Policing

Operations/Command and Control Systems

The San Diego Police Department is in the process of implementing laptop mobile computer terminals (MCTs) throughout the department. Panasonic computers were chosen over PC Mobile because the screens, batteries, and motherboards of PC Mobile often crashed and were problematic. PC Mobile was tested initially because it had an illuminated keyboard, which is a key feature. The Panasonic computers did not have an illuminated keyboard, making them the second choice. However, the San Diego Police Department found a mount that illuminates the keyboard, is easy to dock in and out of, and does not break the pins in the connection.

The use of AFR is a key aspect of the upgrade of the operations information systems. The link between AFR and the RMS will allow the department to more effectively manage information at all levels. Prior to the bid on the RMS, the San Diego Police Department used a paper-only system. The new RMS will allow for the automated transfer of incident information once an incident report is closed. The current RMS is incapable of supporting the demand for information expected to be generated by the department's use of laptop and AFR technology for problem solving. Currently, paper reports are filed, entered by hand in the Records Division, and uploaded into the system. This process is in transition as the RMS and AFR are being integrated into the department.

3.3 Information Systems Related to Community-Oriented Policing

Geographic Information Systems (GIS)

The department uses a standard set of mapping programs, ArcInfo and ArcView, to generate maps for neighborhood policing purposes. These maps are used in the Neighborhood Policing Unit to pinpoint interventions. In addition, maps are available on the department's website and can be accessed by citizens. Crime analysis has extensive mapping capabilities and produces a large number of diverse maps. For example, maps that locate homicide events by type of weapon and victim-offender relationship are displayed by Crime Analysis and used for neighborhood crime presentations and officer analysis.

Problem-Solving Information Systems

The department has been a leader in attempting to integrate problem-solving approaches into departmental activities. The department uses POP Track, a program that allows officers to enter data from problem-solving projects so that they and others can retrieve information such as the nature and location of the problem, steps in the SARA model that were employed, and the outcome of the intervention. As a result,



officers with similar problems, or with problems in similar locations, will know what has been done before and what effect the responses have had.

External Information Systems

The San Diego Data Processing Corporation (SDDPC) is the nonprofit agency charged with ensuring technology coordination, data systems, and data collection across San Diego. It coordinates these efforts for groups as diverse as public works, transportation, and law enforcement. The police department contributes some data to this effort. In addition, ARJIS is the areawide criminal justice data repository, from which officers can retrieve data on individuals who are held in jail, awaiting trial, or on bond.

The Communicator Notification System

The Communicator is an innovative piece of technology being integrated into the department in the fall of 1998. The Communicator, a product of Dialogic Communications, is an automated notification system used to send public safety messages to selected residences and businesses in a specific geographic area. The system interfaces with computerized mapping to help in identifying areas to which notifications will be sent.

The Communicator is a dynamic system that allows users to determine and define groups to whom "scenarios" can be sent via phone or fax. Static systems do not allow users to define subgroups for inclusion in different calling scenarios. In addition, the Communicator provides upgrades on a regular basis. The Communicator will work on a number of different levels and replace labor-intensive tasks that can be automated. In a sense, the Communicator is a relational database that can be queried to produce subgroups to receive messages or "scenarios." The Communicator can sort by location, job status, security level, task, rank, etc. In a city with many volunteer groups, such as San Diego (RSVP, the Reserve Senior Volunteer Patrol officers, block captains, business people, citizen's academy graduates, etc.), it appears that this will be a useful piece of technology. It is also very useful for emergencies. Notification of disasters, lost children, and even events like prowlers in a neighborhood are all seen as potential applications.

The mapping capability of the system is considerable. The system has a donut capability that allows users to define a different message for the inside ring of the donut than for the outside ring. This means that the message for a water main leak or a fire could be tailored to the resident's proximity to the event. Residents closest to the disaster would be given a call to evacuate, while those further away would be advised to stay in their homes and tune to the media or other public information sources for further information. The standard system comes with a phone book, user defined databases, and a standard ArcInfo map of city streets. San Diego is having all of its own mapping systems entered, including beat levels, city land use, and health districts. A large number of tasks that support community and problem-oriented policing can be completed with Communicator. There also are means to link the Communicator to POP Track.



3.4 Relationships and Experience with Vendors

The San Diego Police Department has chosen not to purchase an off-the-shelf product, but rather to treat technology as an ongoing development project. The department is responsible for substantial development activities, such as developing software and configuring hardware to meet local needs. This approach involves some risk; however, there is no existing package that meets the department's needs. As the manager of the Technology Unit stressed, there are two choices for the police department regarding software and hardware development for the records management system. The first is to purchase an off-the-shelf RMS that will not meet the needs of the department. The second choice is to take the risk associated with developing software and configuring hardware from scratch. There was consensus that the latter was the police department's only choice.

A representative of the city's Information Technology and Communications Division (ITC) has been especially concerned about the risks associated with the police department's decisions about how to proceed. ITC had an \$11 million system that failed in the ARJIS project. However, the police department has never had a technology project fail and has confidence in their staff. The experience with Sierra, the vendor for the RMS, is instructive in this regard. The Request for Proposals (RFP) from the San Diego Police Department that led to the selection of Sierra was extensive and, according to members of the Sierra Group, the best they had ever seen. The relationship between Sierra and the police department was a partnership because the department had a clear idea of its needs, had the technical capability to articulate those needs in a specific manner, and sought a vendor that would work with the department rather than dictate to it. The RFP for the RMS was written internally by one of the department programmers and software experts.

4 Analysis Methods Used

4.1 Professional-Era Analysis Methods

Crime Analysis

On a structural level, the chief has expressed some concern about the utility of crime analysis in its present form. He wants more analysis of data – analysis that will lead officers more directly to intervention strategies and tactics. The chief has argued that the presentation of data can provoke further questions, but questions require more analysis to produce problem-solving interventions. The Sergeants Tactical Analysis Team report (STAT report) is viewed as a good example of this. The report includes top calls for service by division and by address. Crime Analysis and police leadership view this report as important and useful, but there is widespread recognition that the report is sorely underutilized. Indeed, it is recognized that many sergeants do not pay much attention to the STAT report. As a consequence, the chief is searching for ways to engage officers with the data.

Another initiative the police department is pursuing is to locate analysts in the division stations rather than in headquarters. The advantage of this structure is that it should



allow analysts to conduct more crime analysis for and with officers. Of course, there will be a loss in the learning that occurs among members of Crime Analysis, and the unit will lose some of the cohesive features of its organization. The trade-off, it is hoped, is that it will produce results that are more useful for officers in problem solving. This change reflects the recognition that more problem solving can be done with the data that is collected. Two additional elements are needed, however, to ensure that result: (1) a system of rewards for officers performing POP; and (2) problem-solving training using data and analysis. It is unclear who would provide such training.

A strong example of professional-era policing analysis is the Crime Analysis Unit's participation in a group convened by the owner of a chain of warehouse club shopping stores, storage facilities, and office supply stores. The owner identified, as a target for action, a mid-city neighborhood of approximately 100,000 residents where much of the violent crime in San Diego occurs. The owner offered the federal government a \$500,000 match if they would put up an equal amount to invest in the neighborhood. The owner became frustrated with the pace of the government and decided to put up all of the money himself. The Crime Analysis Unit Manager has been meeting with the owner and his advisers, police department representatives, neighborhood representatives, and other advisers from such as PERF. The goal of the meetings to date have been to define possible interventions using Crime Analysis data.

The role of Crime Analysis in this effort is to design analytic packages that allow for problem solving of a broad nature. The goal of the project, and of the Crime Analysis unit, goes beyond simply responding to crime or calls for service. The goal is to provide road maps that will lead to broad-based problem-solving strategies and interventions. Thus, it is the job of the Crime Analysis Unit to design data systems and analysis presentations that represent the broad nature of problems. Information such as health, land use, commercial decline, and street use will be collected. This can help the planning group to suggest, design, and implement effective solutions. The project is pushing the Crime Analysis Unit in a new direction.

The Crime Analysis Unit is integrally involved in the planning process for this project. They are not only using typical police data, but are integrating data from SANDGIS (a citywide GIS management group) and the San Diego Organizing Project, a broad-based group of community, civic, and business leaders. The meetings are following a two-stage process: (1) a thought process (planning) to suggest the appropriate questions to ask regarding direction, data needs, and data products, and to define the nature of the problem and suggest a series of steps; and (2) an interpretative process (implementation) that takes the materials and processes from stage one and translates them into action. The police will be integrally involved in this effort, and the chief has assigned it a high priority. The strong expectation within the police department is that this effort will lead to innovative policing strategies and tactics, as well as to the formation of coalitions between the police and business, civic, city agency, and neighborhood groups that do not exist at present in the envisioned form.



4.2 Community-Oriented Policing Analysis Methods

Community Analysis

The department has available standard demographic, census-like data, as well as the data available from ARJIS, SDDPC, and SANDGIS. It does not appear that overlays with crime and demographic data are fully utilized within the current system and operation. This is an area to explore for the future. The ability of analysts and officers to analyze data sets correlated with crime and call-for-service data is a strong argument for expanding this practice. The project discussed in the previous section will be an interesting endeavor and should use some of these analysis methods, including health, city planning, and land use data, to develop a better understanding of why this neighborhood has higher crime rates and related problems than others.

Problem Analysis

As noted previously, problem analysis is largely done using POP Track software and through the work of crime analysts. Crime analysts have become increasingly involved in problem analysis, primarily because of their computer and analysis skills. If there is an area where problem-solving policing in San Diego appears to lag, it is in the analysis and assessment phases of the SARA model. This may be the most difficult aspect for which to train officers and ensure their completion of the tasks.

5 Use of Information

The ISTEP conceptual framework identifies seven information domains that are critical to the successful implementation of community policing. The seven are community interface, inter-organizational linkages, work-group facilitation, environmental scanning, problem orientation, area accountability, and strategic management. In each of these domains, information technology can, if properly applied, greatly enhance the effectiveness of community policing.

Each of the five police departments that ISTEP staff have visited excels in one or more of the seven domains. The following discussion details San Diego's participation in the seven information domains.

5.1 Community Interface

Community policing requires extensive collection and sharing of information. San Diego has made that information available to officers and more recently to the community through their website. The department has a home page that provides monthly pin maps showing selected crimes. Daily maps will be available shortly. E-mails from citizens on a standardized form to request services are received and forwarded to Crime Analysis. Officers will soon be able to receive e-mail directly from citizens.



Captains will also receive e-mail. Every area station will have a home page as well. The department has technologies to help officers prepare for their meetings with the community boards and groups. Community service centers also have LAN access and computers so citizens can access city services. A grant with the San Diego Organizing Project will provide computers and information to community groups so they will have the ability to download information to help them in managing projects.

5.2 Inter-Organizational Linkages

The interest in non-crime data has emerged only recently. Health issues are increasingly seen as important. The chief and assistant chiefs met with the health department recently to discuss health service delivery, customer relations, and other matters.

Mapping of land use and car theft correlation patterns and parolee and robbery correlation patterns are two additional examples of inter-organizational linkages of information. In addition, meetings between parole officers and detectives occur on a regular basis. These are more useful than maps alone, because of the interactive nature of information exchanged. Parole information is available on ARJIS as well as through the parole leads system. The city attorney and State's attorney are on the same network as the police department.

At this point, the level of use of police department data by other agencies is difficult to determine. For the most part, the police department is more of a consumer than a provider of information for other city departments. If other city departments need information that is not available on the department's home page, however, they can call and ask for it specifically.

5.3 Work-Group Facilitation

The department has a team approach that requires joint action and shared responsibility among officers. With a 4/10 work schedule (4 days/week, 10 hours/day), the overlap is critical for information sharing. There is the sense that roll call may not be used very effectively for this purpose. Beat books also exist for the purpose of information sharing. The cruiser is probably the best platform for communicating this information, particularly as all officers receive laptops and have their information updated upon log-on.

Detectives are now going to roll calls to take advantage of available information. Many detective functions already have been decentralized in San Diego and this trend will likely continue. As a result of this new strategy, work-group facilitation will be more effective and focused. It is clear that technology creates new needs for management and intra-organizational relationships.

5.4 Environmental Scanning

Environmental scanning in San Diego involves a management function closely related to community interface, including meeting with other police and non-police professionals and summarizing and providing related aggregate data for management-level



personnel. It also includes scanning the profession and being active in professional organizations. Bringing researchers into the department, attending conferences, and hosting the annual POP conference are also strong examples of scanning.

Information about changes in land use as well as the beat officers' need for information are additional examples of scanning. A tool for sorting information would be useful for most management personnel. Information overload already exists, and management is searching for a way to sort through the large volume of available data, both to catalog it and to determine what is useful and of acceptable quality.

Environmental scanning is used extensively in crime prevention through environmental design (CPTED) in San Diego to complement the department's problem-solving efforts. These efforts include individual problem solving by officers as well as broader initiatives that involve a division, beat, or cross-agency cooperation. The SANDGIS, SDDPC, and ARJIC data are used in part to accomplish this, but Crime Analysis is the primary engine that drives this effort. The Sol Price project should involve CPTED extensively in identifying why crime is occurring in this specific neighborhood.

5.5 Problem Orientation

Although the problem-solving focus of neighborhood policing in San Diego is clearly evident, the POP Track database is underutilized. A large number of paper POP files were opened but not used or not completed. There is uncertainty about whether training or officer rewards will change officer behavior and orientation toward using the POP database.

Clearly, performing assessment is the weakest of the four SARA components in San Diego. There is a large amount of scanning information, but little consistency in assessment. The assessments are not very sophisticated, perhaps indicating the need for organizational development or training in this area. The crime analyst will complete the project, including assessment, if the officer initiates the queries for more data and pushes for the next step. However, there is too little closure of POP files or cases. There is a move to address this weakness by decentralizing crime analysis and moving crime analysts permanently to patrol division stations. This move will allow crime analysts to help officers through the entire SARA process.

5.6 Area Accountability

Area accountability is largely accomplished through beat responsibility. As officers are responsible for beats, captains are responsible for areas. The strategic plan is to be the mechanism to produce this change. Geographic information systems will be a key component in accomplishing this. It is critical, however, that officers buy into the value of such information beyond its use at community meetings and political events such as the city council.



5.7 Strategic Management

Senior staff have access to data and technology to assist in making management and organizational decisions. Interestingly, the assistant chiefs did not get computers until February of 1998. The late addition of technology for management suggests that it may not be viewed as a high priority by senior staff or that management is late in embracing the use of technology.

A computerized patrol assignment plan is being updated to reflect community-policing principles. Senior staff members argue that the issues are not any different for command personnel; they simply aggregate differently for most management issues than for patrol issues. Community policing has forced some rethinking of staffing levels and caused police to think strategically as an organization. Stated schematically, community policing has prompted strategic planning, which in turn has led to greater accountability and individual responsibility, particularly for captains. The extent to which these concerns have penetrated higher levels of the organization remains an open question.

5.8 Other Uses

Use by Officers, Detectives, Management

To date, officers have not been allowed to take computers home from work. However, the recent COPS MORE grant will enable them to do so. The department hopes that this practice will lead to more computer use by officers for job-related purposes. The emphasis on problem solving by line officers means that line officers will get laptops and training first. Management is last in line for equipment and training. While all of the assistant chiefs have computers on their desks, several professed to have little acumen with them. Management will have to struggle to keep up with line-level staff in the use of technology.

Use by Others

The availability of crime data in a variety of forms means that citizens with sufficient motivation and skill may “push” the department in the future. The department maintains on its website an extensive amount of specific location and monthly data regarding crime. It would not be unreasonable to expect that some citizen groups would use crime and arrest data to argue for a redistribution of city resources, including law enforcement. This issue bears watching in the future, particularly the department’s response to outside suggestions for improvement or change in problem identification and problem-solving steps.

6 Summary

6.1 Overall Assessment of Information Technology

The San Diego Police Department has a variety of key pieces in place to make information technology successful in supporting community-oriented policing. First, there



is strong support for community- and problem-oriented policing within the city. This support spans the terms of more than one chief and is well understood throughout the ranks. Second, the department has a strong cadre of insiders who understand hardware and software in addition to the needs of officers on the street. The AFR project is probably the best example of this. Third, the department has decided to make the transition from paper to technology through full-scale paperless automation. Fourth, the department is located in a city that has a strong commitment to technology and access to data for decision making. And last, the department has a strong reputation in the community and in the profession as an innovator. The downside to this is the extent to which an organization of 2,000-plus employees shares a vision of technology and how it should be used. It is unclear at this time the extent to which officers share the commitment to problem solving and technology that exists at top command ranks.

6.2 San Diego Police Department's Best Practices

There are several best practices from the San Diego Police Department. The most important of these is in the area of training. The Northeast area was involved in a pilot laptop training project 18 months ago. Ninety-nine percent of their reports are now submitted via the AFR, and Northeast officers appear to have accepted this practice. Officers complained when their computers were pulled back because they did not want to be without them. Training in the remaining districts is nearly completed.

Training takes place at the academy over two days, 10 hours per day, in two shifts per day. This schedule is followed to accommodate both day and evening officer assignments. A team of five officers does the training, and the classroom holds 20 students, each of whom has a terminal. The classes are set up in four rows of five seats, with one teacher assigned to each row. The entire class moves at the pace of the slowest student. By the end of the training, each student has submitted an arrest report and has completed a minimum of four real-world exercises. It should be noted that the involvement of sworn officers in software development and training greatly enhances the viability of the training and future implementation of that training.

Another area of best practices is community interface. The San Diego Police Department makes a substantial effort to involve the community in problem solving, and does so through a number of innovative means that involve information technology. The website is a good example of this. It allows citizens to obtain recent crime information in a location-specific context. The use of community service centers to provide access to these data is also important.

The SANDGIS is a best practice worthy of emulating in other jurisdictions. The ability to merge and call on a variety of social, physical, and behavioral indicators in a geo-coded format enhances work-group facilitation and commitment to problem solving. By enhancing the collection of data and mapping in a coordinated way, SANDGIS enables a number of innovative, cross-department efforts to understand and address problems.

